# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/531,652 | 03/07/2006 | Jorge Diniz Queiroga Loureiro | 41952/314792 | 1516 |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/531,652 | LOUREIRO, JORGE DINIZ QUEIROGA |
| | Examiner | Art Unit | |
| | Son T. Hoang | 2169 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 April 2005*.

2a)☐ This action is **FINAL**.      2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *29 July 2005*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

## DETAILED ACTION

The instant application having Application No. 10/531,652 has a total of 33

claims pending in the application; there are 13 independent claims and 20 dependent

claims, all of which are ready for examination by the Examiner.

### Oath/Declaration

1.      The Applicant's oath/declaration has been reviewed by the Examiner and is

found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

### Information Disclosure Statement

2.      As required by **M.P.E.P. 609(C)**, the Applicant's submission of the Information

Disclosure Statement dated July 27, 2005 is acknowledged by the Examiner and the

cited references have been considered in the examination of the claims now pending.

As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the

Examiner is attached to the instant office action.

### Priority

3.      The Applicant's claim for foreign priority of South African Patent Application No.

2001/8533 is confirmed. The Examiner takes the foreign filing date of October 17, 2001

into consideration.

### Specification

4.      The Specification is objected by the Examiner. Evidently, "*Background of The

Invention*" and "*Detailed Description of The Invention*" sections are missing. Appropriate

corrections are required.

The following guidelines illustrate the preferred layout for the specification of a

utility application. These guidelines are suggested for the applicant's use.

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should
include the following sections in order. Each of the lettered items should appear in
upper case, without underlining or bold type, as a section heading. If no text follows the
section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
    DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
    COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37
    CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A
    "Sequence Listing" is required on paper if the application discloses a
    nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if
    the required "Sequence Listing" is not submitted as an electronic
    document on compact disc).

### Title

5.      The title "*Data Management*" of the invention is objected by the Examiner for

being broad and indefinite. Accordingly, the title of the invention should be placed at the

top of the first page of the specification unless the title is provided in an application data

sheet. The title of the invention should be brief but technically accurate and descriptive,

preferably from two to seven words and may not contain more than 500 characters. See

37 CFR 1.72(a) and MPEP § 606.

## *Abstract*

6.      The abstract of the disclosure does not commence on a separate sheet in

accordance with 37 CFR 1.52(b)(4).  A new abstract of the disclosure is required and

must be presented on a separate sheet, apart from any other text.

## *Drawings*

7.      The drawings were received on April 15, 2005.  These drawings are acceptable

for the examination purposes.

## *Claim Rejections - 35 USC § 112*

8.      The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

9.      **Claims 22-23**, and **26-33** are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which the Applicant regards as the invention.

Regarding **claim 22**, the Applicant recites the "*the database component is*

*equivalent to the database as defined in Claims 1 to 7*". Accordingly, this is one

of the improper ways for multiple dependent claim wording. See MPEP §

608.01(n).

Regarding **claim 23**, the Applicant recites the "*the computer program*

*component is equivalent to the computer program product as claimed in Claims 8*

_to 20_". Accordingly, this is one of the improper ways for multiple dependent claim wording. See MPEP § 608.01(n).

Regarding **claims 26-33**, they do not set forth to particularly point out and distinctly claim the subject matters which the Applicant regards as the invention. Evidently, these claims do not set limitations of what is/are included and what is/are not included. It is assumed that entire specification is claimed through these claims.

### Claim Rejections - 35 USC § 101

10.     35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**11.     Claims 1-7; 8-20; 21-23;** and **26-31**are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matters.

Regarding **claim 1**, "_a database of information relating to a particular topic_" is being recited. However, the Applicant does not provide any explicit definition(s) for the term "_a database_" in the disclosure. Furthermore, "_a database of information_" can easily be interpreted by a person with ordinary skills in the art as an abstract idea which does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter).

Regarding **claims 2-7**, they fail to resolve the deficiencies of **claim 1** and only further limit the scope of **claim 1**. Therefore, **claims 2-7** are also rejected under 35 U.S.C. 101.

Regarding **claims 8** and **21** recite "*a computer program product for managing the content of a database*" and "*an information management* product" respectively. However, "*a computer program product*" and "*an information management product*" can easily be interpreted by a person with ordinary skills in the art as software per se and functional descriptive material consisting of data structures and computer programs, which impart functionality when employed as a computer component. As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

Regarding **claims 9-20**, **22-23**, they fail to resolve the deficiencies of **claims 8**, **21** and only further limit the scopes of **claims 8**, **21** respectively. Therefore, **claims 9-20**, **22-23** are also rejected under 35 U.S.C. 101.

**Claims 26-31** contain the same subject matters as disclosed in **claims 1-23** and therefore are rejected under 35 U.S.C. 101 for the same reasons as discussed above.

The claims above lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive

material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d
at 1360, 31 USPQ2d at 1759. When <u>functional</u> descriptive material is recorded
on some computer-readable medium, it becomes structurally and functionally
interrelated to the medium and will be statutory in most cases since use of
technology permits the function of the descriptive material to be realized.
Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir.
1994)

Merely claiming <u>non</u>functional descriptive material, i.e., abstract ideas,
stored on a computer-readable medium, in a computer, or on an electromagnetic
carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209
USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable
as abstract ideas because "[t]he sole practical application of the algorithm was in
connection with the programming of a general purpose computer.")

### *Claim Rejections - 35 USC § 102*

12.    The following is a quotation of the appropriate Paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this Section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or
in public use or on sale in this country, more than one year prior to the date of application for
patent in the United States.

**13.    Claims 1-3; 8-9; 21-23; 24; 25; 26; 27; 28; 29; 30; 31; 32; 33;** are rejected under
35 U.S.C. 102(b) as being anticipated by Anthony (Pat. No. US 5,815,830, published on
September 29, 1998).

Regarding **claim 1**, Anthony clearly shows and discloses a database of information relating to a particular topic (*A database has been created to cover the topic: planets of our solar system*, [Column 5 Lines 65-67]), the database including a number of portions which each contain information on a particular aspect of the topic (*The database contains the following text and picture portions: Earth, Jupiter, Mercury, Our moon, Pluto etc.*, [Column 5, Line 65 → Column 6, Line 10]), each portion being sub-divided into a number of sub-portions which are each linked to one another in a predetermined sequential arrangement wherein each subsequent sub-portion in the sequential arrangement contains further information on the topic (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the text description for portion "planet". This text description sub-portion of "planet" contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the mouse on any of the hyperlinked words which refer to any of text / picture portions in [Column 6, Lines 1-10], they would automatically be taken to that portion and its associated sub-portion text would be displayed with again any hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7, Line 13]).

Regarding **claim 2**, Anthony further discloses a database, wherein the portions of the database are arranged into sets which are arranged in a predetermined sequential arrangement ([Column 6, Lines 1-10]).

Regarding **claim 3**, Anthony further discloses a database, wherein

selected sub-portions of the database, include primary key expressions which

are embedded in the information contained in said sub-portions, each primary

key expression being linked to another sub-portion of the database which

contains further information relating to the subject matter of the primary key

expression (*When a user selects the portion "planet" of "planets of our solar*

*system" topic, the sub-portion text of "planet" is shown and contains the text*

*description for portion "planet". This text description sub-portion of "planet"*

*contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn"*

*as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the*

*mouse on any of the hyperlinked words which refer to any of text / picture*

*portions in [Column 6, Lines 1-10], they would automatically be taken to that*

*portion and its associated sub-portion text would be displayed with again any*

*hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7,

Line 13]).

Regarding **claim 8**, Anthony clearly shows and discloses a computer

program product for managing the content of a database of information relating

to a particular topic ([Column 3, Lines 40-42]), wherein the database includes a

number of portions which each contain information on a particular aspect of the

topic and which are each sub-divided into a number of sub-portions (*The*

*database contains the following text and picture portions: Earth, Jupiter, Mercury,*

*Our moon, Pluto etc. and their corresponding text description sub-portions,*

[Column 5, Line 65 → Column 6, Line 10]), the computer program product

including program instructions for linking the sub-portions of each portion of the

database, to one another in a predetermined sequential arrangement wherein

each subsequent sub-portion in the sequential arrangement contains further

information on the topic (*When a user selects the portion "planet" of "planets of*

*our solar system" topic, the sub-portion text of "planet" is shown and contains the*

*text description for portion "planet". This text description sub-portion of "planet"*

*contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn"*

*as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the*

*mouse on any of the hyperlinked words which refer to any of text / picture*

*portions in [Column 6, Lines 1-10], they would automatically be taken to that*

*portion and its associated sub-portion text would be displayed with again any*

*hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7,

Line 13]).

Regarding **claim 9**, it contains the same subject matters as in **claim 3** and

therefore is essentially rejected for the same reasons as discussed in **claim 3**.

Regarding **claim 21**, Anthony clearly shows and discloses an information

management product ([Column 3, Lines 40-42]), which comprises:

a database component containing information relating to a

particular topic (*A database has been created to cover the topic: planets of*

*our solar system,* [Column 5 Lines 65-67]), the database component

including a number of portions which each contain information on a

particular aspect of the topic and which are each sub-divided into a

number of sub-portions (*The database contains the following text and*

*picture portions: Earth, Jupiter, Mercury, Our moon, Pluto etc. and their*

*corresponding text description sub-portions*, [Column 5, Line 65 →

Column 6, Line 10]); and

a computer program component for managing the content of the

database ([Column 3, Lines 40-42]), the computer program component

including program instructions for linking the sub-portions of each portion

of the database to one another in a predetermined sequential

arrangement wherein each subsequent sub-portion in the sequential

arrangement contains further information on the topic (*When a user*

*selects the portion "planet" of "planets of our solar system" topic, the sub-*

*portion text of "planet" is shown and contains the text description for*

*portion "planet". This text description sub-portion of "planet" contains*

*hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as*

*shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the*

*mouse on any of the hyperlinked words which refer to any of text / picture*

*portions in [Column 6, Lines 1-10], they would automatically be taken to*

*that portion and its associated sub-portion text would be displayed with*

*again any hyperlinks automatically found and highlighted*, [Column 6, Line

1 → Column 7, Line 13]).

Regarding **claim 22**, it contain the same subject matters as disclosed in **claims 1-7** and therefore is essentially rejected for the same reasons as discussed in **claims 1-7**.

Regarding **claim 23**, it contain the same subject matters as disclosed in **claims 8-20** and therefore is essentially rejected for the same reasons as discussed in **claims 8-20**.

Regarding **claim 24**, Anthony clearly shows and discloses a method of compiling a database of information relating to a particular topic ([Column 5, Line 65 → Column 7, Line 13]), which includes the steps of:

compiling a number of portions of the database, wherein each portion contains information on a particular aspect of the topic and wherein each portion is sub-divided into a number of sub-portions (*The database contains the following text and picture portions: Earth, Jupiter, Mercury, Our moon, Pluto etc. and their corresponding text description sub-portions*, [Column 5, Line 65 → Column 6, Line 10]);

defining primary key expressions in the information contained in selected sub-portions of the database (*All the keys "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as highlighted after the concatenating process*, [Column 6, Line 40 → Column 7, Line 13]); and

creating user-executable links between each primary key expression and another sub-portion of the database which contains further

information relating to the subject matter of the primary key expressions (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the text description for portion "planet". This text description sub-portion of "planet" contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the mouse on any of the hyperlinked words which refer to any of text / picture portions in [Column 6, Lines 1-10], they would automatically be taken to that portion and its associated sub-portion text would be displayed with again any hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7, Line 13]).

Regarding **claim 25**, Anthony clearly shows and discloses a method of compiling a database of information relating to a particular topic ([Column 5, Line 65 → Column 7, Line 13]), which includes the steps of:

compiling a number of portions of the database, wherein each portion contains information on a particular aspect of the topic and wherein each portion is sub-divided into a number of sub-portions (*The database contains the following text and picture portions: Earth, Jupiter, Mercury, Our moon, Pluto etc. and their corresponding text description sub-portions,* [Column 5, Line 65 → Column 6, Line 10]); and

linking each of the sub-portions of each portion of the database to one another in a predetermined sequential arrangement wherein each subsequent sub-portion in the sequential arrangement contains further information on the topic (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the text description for portion "planet". This text description sub-portion of "planet" contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the mouse on any of the hyperlinked words which refer to any of text / picture portions in [Column 6, Lines 1-10], they would automatically be taken to that portion and its associated sub-portion text would be displayed with again any hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7, Line 13]).

Regarding **claims 26-33**, they contain the same subject matters as disclosed in **claims 1**, **8**, **21**, **24**, **25** and therefore are essentially rejected for the same reasons as discussed in **claims 1**, **8**, **21**, **24**, **25**.

### *Claim Rejections - 35 USC § 103*

14.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.     **Claims 4-7; 10-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony (Pat. No. US 5,815,830, published on September 29, 1998) in view of Flora et al. (Pat. No. US 6,714,215, filed on May 19, 2000; hereinafter Flora).

Regarding **claims 4-5; 10, 12;** Anthony does not explicitly disclose the sub-portions of the database including secondary key expressions which are embedded in the information contained in said sub-portions and which are each linked to a particular explanatory note or other explanatory notes of the database.

Flora discloses the user is able to execute a hyperlink and display an expanded version of the visual media item. The user can jump to an expanded version of a visual media item that could include such things as explanatory text, related text articles or further hyperlinks to related information ([Column 7, Lines 39-52]).

It would have been obvious to a person with ordinary skills in the art at the time of the invention to incorporate the teachings of Flora with the teachings of Anthony for the purpose of accessing an expanded version of a selected document and select hyperlinks associated with related content ([Column 2, Lines 34-37] of Flora).

Regarding **claims 6, 11**, Anthony does not disclose explanatory notes include primary key expressions. Flora discloses a user is able to execute a hyperlink and display an expanded version of the visual media item. This

expanded version could include further hyperlinks to related information or related text articles ([Column 7, Lines 39-52]). It is obvious that these further hyperlinks could be primary expressions which link to another portion of the database.

Regarding **claim 7**, Anthony further discloses each sub-portion of each set includes a link to the first sub-portion of at least one portion of a succeeding set (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the text description for portion "planet". This text description sub-portion of "planet" contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn" as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the mouse on any of the hyperlinked words which refer to any of text / picture portions in [Column 6, Lines 1-10], they would automatically be taken to that portion and its associated sub-portion text would be displayed with again any hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7, Line 13]).

16.     **Claims 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony (Pat. No. US 5,815,830, published on September 29, 1998) in view of Flora et al. (Pat. No. US 6,714,215, filed on May 19, 2000; hereinafter Flora) and further in view of Flinn et al (Pub. No. US 2001/0047358, filed on March 13, 2001; hereinafter Flinn).

Regarding **claim 13**, Anthony and Flora do not disclose the default explanatory notes which each contain information in the form of an overview of the information contained in a particular sub-portion of the database, and

displaying the default explanatory note simultaneously with the relevant sub-portion on a display device.

Flinn discloses the topic-based navigation mode enables users to view and select topic objects in the content network. Flinn further teaches when a topic object is selected, the display interface is reorganized to allow the direct viewing of the meta-information associated with the topic object as well as related topic objects. Further, during the topic-based navigation mode, the display interface includes a related content window, which presents a summary of content objects that are pertinent to the selected topic. Accordingly, meta-information for the related content object is displayed, as well as related objects ([0110]-[0111]).

It would have been obvious to a person with ordinary skills in the art at the time of the invention to incorporate the teachings of Flinn with the teachings of Anthony, as taught by Flora, for the purpose of encapsulating information in an object and relating the object to the other object in the network ([0010] of Flinn).

Regarding **claims 14-15**, Anthony further discloses portions of the database are arranged in sets which are sequentially arranged ([Column 6, Lines 1-10]) and linking pre-selected sub-portions of a particular portion of one set to the first sub-portion of at least one portion of succeeding set; wherein the operation to link the portions and sub-portions of the database is effected by means of hypertext links (*When a user selects the portion "planet" of "planets of our solar system" topic, the sub-portion text of "planet" is shown and contains the*

*text description for portion "planet". This text description sub-portion of "planet"*

*contains hyperlinks to "Jupiter", "Satellites of Jupiter", "Io" and "Rings of Saturn"*

*as shown in [Column 6, Line 40 – Column 7, Line 13]. If the user clicks the*

*mouse on any of the hyperlinked words which refer to any of text / picture*

*portions in [Column 6, Lines 1-10], they would automatically be taken to that*

*portion and its associated sub-portion text would be displayed with again any*

*hyperlinks automatically found and highlighted,* [Column 6, Line 1 → Column 7,

Line 13]).

Regarding **claim 16**, Flinn further discloses recording the address in the

database of each sub-portion of the database from which a link using a primary

key expression is achieved (*The referenced information may include files, text,*

*documents, articles, images, audio, video, multi-media, software applications and*

*electronic or magnetic media or signals. Where the content object supplies a*

*pointer to information, the pointer may be a memory address. Where the content*

*network encapsulates information on the Internet, the pointer may be a Uniform*

*Resource Locator (URL),* [0044]).

Regarding **claim 17**, Flinn further discloses displaying on a display device,

title information representing each sub-portion from which a link is obtained via

said primary key expressions, so as to provide a user with a record of a

conversation path formed by sub-portions of the database which are linked via

said primary key expressions (*meta-information include a tile, a sub-title, one or*

*more descriptions of the topic provided at different levels of detail, the publisher*

*of the topic meta-information, the date the topic object was created. Meta-*

*information may also include a pointer such as uniform resource locator (URL),*

[0045] - also see [0111] for displaying the metadata)

17.    **Claims 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Anthony (Pat. No. US 5,815,830, published on September 29, 1998) in view of Flora et

al. (Pat. No. US 6,714,215, filed on May 19, 2000; hereinafter Flora) and further in view

of Flinn et al (Pub. No. US 2001/0047358, filed on March 13, 2001; hereinafter Flinn)

and further in view of Nielson (Pat. No. US 5,761,436).

Regarding **claim 18**, Anthony, Flora and Flinn do not disclose displaying

the title information in an order representing the sequence in which the sub-

portions were accessed by a user.

Nielson discloses providing a hypertext user with a history facility for

displaying accessed hypernodes (web pages) based on when the hypernode

was accessed and based on the placement of the hypernode in the hyperlink

hierarchy (Abstract).

It would have been obvious to a person with ordinary skills in the art at the

time of the invention to incorporate the teachings of Nielson with the teachings of

Anthony, as taught by Flora and Flinn, for the purpose of allowing the user to

more quickly find and reference previously viewed hypernode ([Column 2, Lines

29-34] of Nielsen).

Regarding **claim 19**, Nielson further discloses permitting any part of the information contained in a sub-portion or explanatory note of the database, to be selected by a user, and for the user's selection to be recorded (*A user interface that allows a user to interact with a computer display by pointing at selectable control areas on the display and activating a command or computer operation associated with the selectable control area*, [Column 4, Lines 11-15]).

Regarding **claim 20**, Nielson further discloses recording users' selections of primary and secondary key expressions (*A user interface that allows a user to interact with a computer display by pointing at selectable control areas on the display and activating a command or computer operation associated with the selectable control area*, [Column 4, Lines 11-15]). It's obvious that the primary and secondary key expressions are recorded since their accessed records are used to make up the history list for displaying accessed hypernodes.

### *Conclusion*

18.    These following prior arts made of record and not relied upon are considered

pertinent to Applicant's disclosure:

Szabo (Pat. No. US 7,181,438) teaches database access system.

Rennison et al. (Pat. No. US 6,154,213) teaches immersive movement-

based interaction with large complex information structures.

Becker et al. (Pat. No. US 6,848,075) teaches internet web browser with

memory enhanced hyperlink display.

Oren et al. (Pat. No. US 6,539,387) teaches structured focused hypertext

data structure.

The Examiner requests, in response to this Office action, support(s) must be

shown for language added to any original claims on amendment and any new claims.

That is, indicate support for newly added claim language by specifically pointing to

page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the

Examiner in prosecuting the application.

When responding to this office action, Applicant is advised to clearly point out the

patentable novelty which he or she thinks the claims present, in view of the state of the

art disclosed by the references cited or the objections made. He or she must also show

how the amendments avoid such references or objections See 37 CFR 1.111(c).

### *Contact Information*

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Son T. Hoang whose telephone number is (571) 270-1752. The Examiner can normally be reached on Monday - Friday (7:30 AM – 5:00 PM).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mohammad Ali can be reached on (571) 272-4105. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.H./
Son T. Hoang
Patent Examiner
August 8, 2007

MOHAMMAD ALI
PRIMARY EXAMINER